WHAT IS CLAIMED IS:

1. A perfusion cannula system for directing blood through the vasculature of a patient, comprising:

a cannula body comprising a proximal end, a distal end, and at least one lumen extending therebetween;

a balloon located on an exterior surface of the cannula body; and

means for deploying the balloon within the vasculature

whereby space may be provided between a vessel wall and the cannula body when the cannula body resides within the patient to permit blood flow past the cannula body.

2. The cannula system of Claim 1, wherein the balloon defines a perfusion lumen when deployed.

3. The cannula system of Claim 1, wherein the balloon comprises a first balloon and further comprising at least a second balloon spaced radially from the first balloon.

4. The cannula system of Claim 1, further comprising a second lumen.

5. The cannula system of Claim 1, wherein the deploying means comprises an inflation lumen.

6. A perfusion cannula system for directing blood through the vasculature of a patient, comprising:

a cannula body comprising a proximal end, a distal end, and at least one lumen extending therebetween; and

means for creating space around the cannula body within the vasculature to permit blood flow past the cannula body.

7. The cannula system of Claim 6, wherein the space creating means is coupled with the cannula body.

8. The cannula system of Claim 6, wherein the space creating means is integral with the cannula body.

9. The cannula system of Claim 6, wherein the space creating means comprises a collapsible element.

10. The cannula system of Claim 6, wherein the space creating means comprises an expandable element.

11. A perfusion system for directing blood through the vasculature of a patient, comprising a multilumen cannula and a plurality of radially spaced balloons configured to be selectively inflated while residing with the vasculature to create space around the cannula within the vasculature to permit blood flow past the cannula.

12. The perfusion system of Claim 11, wherein the balloons are integrally formed with the cannula.

13. The perfusion system of Claim 11, wherein the cannula comprises inflation lumens.

14. A perfusion cannula system, comprising:

a cannula comprising a cannula body defining at least one lumen extending between a proximal end and a distal end, said cannula body having an aperture formed therein in fluid communication with said lumen; and

a sleeve carried by the cannula and configured to be moveable relative to the aperture to selectively cover and uncover the aperture as desired.

15. The cannula system of Claim 14, where the sleeve is carried on the outside of the cannula body.

16. The perfusion cannula system of Claim 14, wherein the sleeve is configured to move radially with respect to the cannula body.

17. The perfusion cannula system of Claim 14, wherein the sleeve is configured to move longitudinally distally and proximally with respect to the cannula body.

18. The perfusion cannula system of Claim 14, further comprising at least one additional aperture

19. The perfusion cannula system of Claim 14, further comprising a second lumen.

20. A perfusion cannula system comprising:

a cannula body comprising a proximal end, a distal end, at least one lumen extending therebetween, and a means for enhancing blood flow past the cannula when the cannula body resides within the patient.

21. The cannula system of Claim 20, wherein the enhancing means is capable of selectively enhancing blood flow past the cannula.

22. The cannula system of Claim 20, wherein the enhancing means comprises at least one balloon.

23. The cannula system of Claim 20, wherein the enhancing means comprises at least one balloon defining a perfusion lumen.

24. The cannula system of Claim 20, wherein the enhancing means of the cannula body comprises:

at least one aperture defined in the cannula body in fluid communication with said lumen; and

a sleeve carried by the cannula and configured to be moveable relative to the aperture to selectively cover and uncover the aperture as desired.

25. An extracardiac heart assist system, comprising:

a pump having an inlet and an outlet;

an inflow conduit coupled with the inlet;

an outflow conduit coupled with the outlet; and

an intravascular conduit having a proximal end, a distal end, at least one lumen extending therebetween, and a means for selectively enhancing blood flow past the cannula when the cannula resides within the patient, the intravascular conduit configured to provide fluid communication between the vasculature of a patient and at least one of the inflow conduit and the outflow conduit..

26. The extracardiac heart assist system of Claim 25, wherein the intravascular conduit is a first conduit configured to couple the inflow conduit to the vasculature of the patient at a first location, and further comprising a second intravascular conduit configured to couple the outflow conduit to the vasculature of the patient at a second location.

27. The extracardiac heart assist system of Claim 25, wherein the intravascular conduit is configured to couple the inflow conduit and the outflow conduit to the vasculature of the patient at a single location.

28. The extracardiac heart assist system of Claim 25, wherein the intravascular conduit further comprises a plurality of lumens extending between the proximal end and the distal end.

29. The extracardiac heart assist system of Claim 25, wherein the pump is configured for insertion within the patient.

30. The extracardiac heart assist system of Claim 25, wherein the pump is configured for use outside the patient.

31. The extracardiac heart assist system of Claim 25, wherein the pump is configured to pump blood through the patient at subcardiac volumetric rates, the pump having an average flow rate that, during normal operation thereof, is substantially below that of the patient's heart when healthy.

32. The extracardiac heart assist system of Claim 25, further comprising a reservoir coupled with the inflow conduit or the outflow conduit.

33. The extracardiac heart assist system of Claim 25, wherein the enhancing means comprises at least one balloon coupled to the cannula body.

34. The extracardiac heart assist system of Claim 25, wherein the enhancing means of the cannula body comprises:

at least one aperture defined in the cannula body in fluid communication with said lumen; and

a sleeve carried by the cannula and configured to be moveable relative to the aperture to selectively cover and uncover the aperture as desired.

35. A method of treating a patient using an extracardiac heart assist system, comprising:

inserting a cannula system into the vasculature of a patient, wherein the cannula system is actuatable to enhance blood flow past the cannula when the cannula resides in the vasculature of the patient;

selectively actuating the cannula system, whereby blood flow past the cannula is enhanced.

36. The method of Claim 35, wherein the cannula system comprises a balloon and wherein selectively actuating the cannula system comprises selectively inflating the balloon.

37. The method of Claim 35, wherein the cannula system comprises an aperture formed in a cannula wall and a sleeve disposed about the cannula wall covering the aperture and wherein selectively actuating the cannula system comprises selectively moving the sleeve relative the aperture to uncover the aperture.

38. The method of Claim 35, wherein selectively actuating the cannula system comprises twisting the cannula system within the vasculature.

39. The method of Claim 35, wherein selectively actuating the cannula system comprises expanding or contracting a portion of the cannula system to provide a blood carrying space between a vessel wall and the cannula system when applied to the patient.